

## **Current Claims**

1     **1.(currently amended)**     An apparatus for simulating a pulse and correlated heart beat of  
2     an animal, the apparatus comprising a playback device for generating a first electronic signal  
3     corresponding to a pulse and a second electronic signal corresponding to a correlated heart  
4     beat, a tactile pulse simulator for receiving the pulse signal and generating a pressure pulse  
5     pulses simulating an arterial pulse discernible by touch and an audio simulator for receiving  
6     the correlated heart beat signal and recreating the heart beat to be heard through a  
7     stethoscope.

1     **2.(currently amended)**     An apparatus for simulating a right side pulse and a left side  
2     pulse and correlated heart beat of an animal, the apparatus comprising a playback device for  
3     generating a first electronic signal corresponding to the right side pulse, a second electronic  
4     signal corresponding to the left side pulse and a third electronic signal corresponding to a  
5     correlated heart beat, a first tactile pulse simulator for receiving the right pulse signal and  
6     generating a pressure ~~pulse~~ pulses simulating a right side arterial pulse discernible by touch,  
7     a second tactile pulse simulator for receiving the left pulse signal and generating a pressure  
8     ~~pulse~~ pulses simulating a left side arterial pulse discernible by touch and an audio simulator  
9     for receiving the correlated heart beat signal and recreating the heart beat to be heard through  
10    a stethoscope.

1     **3.(withdrawn)**     A method for training health care provides in the proper use of a  
2     stethoscope including the steps of placing a user's finger on a tactile pulse simulator of the  
3     apparatus of claim 1, placing a stethoscope listening end on an audio heart beat simulator,  
4     placing stethoscope ear pieces in a user's ear and sensing different cardiovascular conditions  
5     including normal and abnormal conditions.

1     **4.(withdrawn)**     A method for training health care provides in the proper use of a  
2     stethoscope including the steps of placing a first finger on a right side tactile pulse simulator

3 of the apparatus of claim 2, placing a second finger on a left side pulse simulator, placing a  
4 stethoscope listening end on a audio heart beat simulator, placing stethoscope ear pieces in  
5 a user's ear, generating a pulse and correlated heart beat signal in a playback unit and sensing  
6 different cardiovascular conditions including normal and abnormal conditions.

1 5.**(withdrawn)** A system comprising a digital processing unit (DPU) subsystem having  
2 a user interface, bodily attribute generation software and an input apparatus and output  
3 apparatus for human-DPU interaction, a visual output subsystem, an acoustic output  
4 subsystem, and/or a tactile output subsystem, where the input and output apparatus, the  
5 generation software and the output subsystems operate to visually, acoustically and tactually  
6 simulate different animal including human conditions so that the visual, audio and tactile  
7 outputs are temporally coupled for a more realistic simulation of symptoms of a desired  
8 condition.

1 6.**(withdrawn)** An apparatus including a digital processing unit (DPU) having a user  
2 interface, a bodily attribute generation software and an input device and output device for  
3 human-DPU interaction, a visual output device in communication with the DPU, an acoustic  
4 output device in communication with the DPU and/or a tactile output device in  
5 communication with the DPU, where the DPU, through interaction with a user via the input  
6 and output devices, the generation software and the output subsystems, visually, acoustically  
7 and/or tactually simulates different animal including human conditions so that the visual,  
8 audio and tactile outputs are temporally coupled for a more realistic simulation of symptoms  
9 of the desired condition.

1 7.**(withdrawn)** A method for training/teaching a user, where the method includes  
2 interacting with a user interface of a DPU via an input apparatus and output apparatus and  
3 identifying a condition of an animal including a human from audio, visual and/or tactile  
4 output generated in the DPU and outputted to an audio output, a visual output and/or a tactile

5 output which simulate symptoms of the condition from a list of conditions generated by the  
6 DPU.

1 8.(currently presented) The apparatus of claim 1, wherein the tactile pulse simulator  
2 comprises a tactile switch capable of generating pulses simulating the arterial pulse,  
3 collapsible tube apparatus or piezoelectric transducer.

1 9.(previously presented) The apparatus of claim 1, wherein the tactile pulse simulator and  
2 the audio simulator are housed within a housing.

1 10.(currently presented) The apparatus of claim 9, wherein the tactile pulse simulator  
2 comprises a resilient cover covering a tactile switch capable of generating pulses simulating  
3 the arterial pulse.

1 11.(previously amended) The apparatus of claim 9, wherein the housing comprises a  
2 simulated upper part of a human body including a simulated chest portion and simulated arm  
3 portion.

1 12.(currently amended) The apparatus of claim 11, wherein the tactile pulse simulator is  
2 located in the arm portion at a wrist portion corresponding to a location used by medical  
3 professionals to detect and monitor a the patient's arterial pulse and the audio simulator is  
4 located within the chest portion.

1 13.(currently presented) The apparatus of claim 12, wherein the tactile pulse simulator  
2 comprises a resilient cover covering a tactile switch capable of generating pulses simulating  
3 the arterial pulse.

1 14.(previously presented) The apparatus of claim 1, wherein the tactile pulse simulator is  
2 within in a first housing and the audio simulator is within a second housing.

1 15.(currently amended) The apparatus of claim 14, wherein the first housing simulates  
2 a human wrist and the tactile pulse simulator comprises a resilient cover covering a tactile  
3 switch capable of generating pulses simulating the arterial pulse and is located at a position  
4 in the wrist corresponding to a position in a patient where a the arterial pulse is detected and  
5 monitored by a medical professional.

1 16.(currently presented) The apparatus of claim 2, wherein the tactile pulse simulators  
2 comprise tactile switches capable of generating pulses simulating the arterial pulse,  
3 collapsible tube apparatuses or piezoelectric transducers.

1 17.(previously amended) The apparatus of claim 2, wherein the tactile pulse simulators and  
2 the audio simulator are housed within a housing, where the housing comprises a simulated  
3 upper part of a human body including a simulated chest portion, a simulated right arm portion  
4 and a simulated left arm portion.

1 18.(currently presented) The apparatus of claim 17, wherein the right pulse tactile pulse  
2 simulator is located in the right arm portion at a right wrist portion corresponding to a  
3 location used by medical professionals to detect and monitor a the patient's right side arterial  
4 pulse, the left pulse tactile pulse simulator is located in the left arm portion at a left wrist  
5 portion corresponding to a location used by medical professionals to detect and monitor a the  
6 patient's left side arterial pulse and the audio simulator is located within the chest portion.

1 19.(currently presented) The apparatus of claim 18, wherein the tactile pulse simulators  
2 comprise a resilient cover covering a tactile switch capable of generating pulses simulating  
3 the arterial pulses.

1 20.(currently presented) An apparatus for simulating a right side arterial pulse and a left  
2 arterial side pulse and correlated heart beat of a human, the apparatus comprising:

3 a housing including:

4 a simulated upper human body portion having:

5 a chest portion,

6 a right arm portion, and

7 a left arm portion;

8 a playback device for generating a first electronic signal corresponding to the right  
9 side arterial pulse, a second electronic signal corresponding to the left side arterial pulse and  
10 a third electronic signal corresponding to a correlated heart beat;

11 a first tactile pulse simulator for receiving the right pulse signal and generating a  
12 ~~pressure pulse~~ pulses simulating a right side arterial pulse discernible by touch, where the  
13 first tactile pulse simulator is located at an lower inner arm position in the right arm of the  
14 housing so that the right pulse can be felt;

15 a second tactile pulse simulator for receiving the left pulse signal and generating a  
16 ~~pressure pulse~~ pulses simulating a right side arterial pulse discernible by touch, where the  
17 second tactile pulse simulator is located at an inner wrist position in the left arm of the  
18 housing; and

19 an audio simulator for receiving the heart beat signal and generating an audible  
20 recreation of the correlated heart beat, where the audio simulator is located in the chest  
21 portion of the housing so that the heart beat can be heard through a stethoscope position on  
22 a surface of the chest portion of the housing.

1 21.(currently presented) The apparatus of claim 20, wherein the tactile pulse simulators  
2 comprise tactile switches capable of generating pulses simulating the arterial pulses,  
3 collapsible tube apparatuses or piezoelectric transducers.

1 22.(previously presented) The apparatus of claim 20, wherein the tactile pulse simulators  
2 and the audio simulator are housed within a housing, where the housing comprises a  
3 simulated an upper part of a human body including a simulated chest portion, a simulated  
4 right arm portion and a simulated left arm portion.

1 23.(previously presented) The apparatus of claim 22, wherein the right pulse tactile pulse  
2 simulator is located in the right arm portion at a right wrist portion corresponding to a  
3 location used by medical professionals to detect and monitor a the patient's right side arterial  
4 pulse, the left pulse tactile pulse simulator is located in the left arm portion at a left wrist  
5 portion corresponding to a location used by medical professionals to detect and monitor a the  
6 patient's left side arterial pulse and the audio simulator is located within the chest portion.

1 24.(previously presented) The apparatus of claim 23, wherein the tactile pulse simulators  
2 comprise a resilient cover covering a tactile switch capable of generating pulses simulating  
3 the arterial pulse.

1 25.(previously presented) An apparatus for simulating a right side pulse and a left side  
2 pulse and correlated heart beat of a human, the apparatus comprising:

3 a playback device for generating a first electronic signal corresponding to the right  
4 side pulse, a second electronic signal corresponding to the left side pulse and a third  
5 electronic signal corresponding to a correlated heart beat;

6 a first housing including a first tactile pulse simulator for receiving the right side  
7 arterial pulse signal and generating a pressure ~~pulse~~ pulses corresponding to a right arm  
8 arterial pulse discernible by touch;

9 a second housing including a second tactile pulse simulator for receiving the left side  
10 arterial pulse signal and generating a pressure ~~pulse~~ pulses corresponding to a left arm  
11 arterial pulse discernible by touch; and

12 a third housing including an audio simulator for receiving the heart beat signal and  
13 generating an audible recreation of the correlated heart beat and designed to be heard through  
14 a stethoscope position on a surface of the housing.

1 26.(previously presented) The apparatus of claim 25, wherein the tactile pulse simulators  
2 comprise tactile switches capable of generating pulses simulating the arterial pulses,  
3 collapsible tube apparatuses or piezoelectric transducers.

1 27.(previously presented) The apparatus of claim 25, wherein the tactile pulse simulators  
2 comprise a resilient cover covering a tactile switch capable of generating pulses simulating  
3 the arterial pulse.